

Date: Wednesday, 1/11/2006 4:20:52 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 25441A	
Estimate Number : 10278	
P.O. Number : N/A	Part Number : D3121141
This Issue : 1/11/2006 S.O. No. : N/A	Drawing Number : D3121 REV C2
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : MACHINED PARTS	Drawing Revision : C2
Previous Run : 24267A	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 2/18/2006 Qty: 12 Um: Each
Checked & Approved By : <u>SEE COMMENT BELOW</u>	
Comment : Est Rev:Pick:A 04.02.18 New issue KJ/DS	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M174B1000X02000	17-4 SS Bar
-----	-----------------	-------------



Comment: Qty.: 0.5775 f(s)/Unit Total : 6.9300 f(s)
 Material: 17-4 SS Bar per AMS 5604/5643
 (M17-4-B1.000x02.000)
 Identify for D3121-111
 Batch: M14778

En 06/01/21 ✓

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW
 Cut blanks: (1.000" x 2.000") 6.600" long

En 06/01/21

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-111
 2-Deburr
 3-Scribe batch number

En 06/11/23

PHO

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



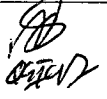

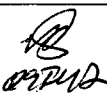

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

En 06/01/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/01/23

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/01/23	#30	one Part SCRAP TAP (10-32) Broke in Part		CANNOT Remove the Broken Piece. Scrap / destroy and Replace.	ED 06/01/23	 06-01-23		 06-01-23

NOTE: Date & initial all entries

Date: Wednesday, 1/11/2006 4:20:53 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 25441A

Part Number: D3121141

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.L 06-01-23 12

6.0

D312121

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-21

Bolt

B 24224

7.0

D3121241

Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-241 Bearing Ass

B 25225

SB 06/01/26

(12)

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-141 as per Dwg D3121.

SB 06/01/26

(12)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

J.L 06-01-26 12

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

YUC

P 6/1/27 (12)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SUC 06/01/30 12

06/01/30

Job Completion



Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

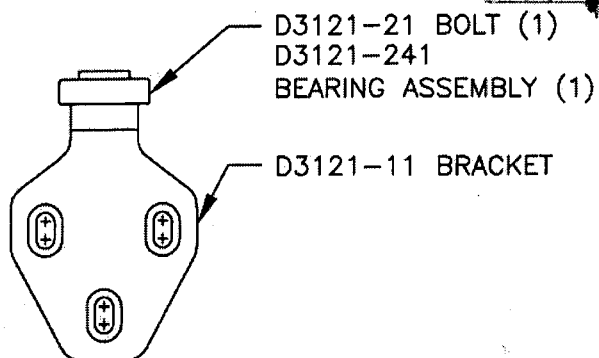
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D3121	REV. C SHEET 1 OF 10
DATE	04.02.17		TITLE	BRACKET ASSEMBLY	SCALE 1:2
A	02.04.15		NEW ISSUE		
B	03.01.16		ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146		
C	04.02.17		ADD CLEARANCE; USE -241 BEARING		
C1	<i>CP</i>	04.03.26	B.97 WAS 4.00; 6.11 WAS 6.14		
C2	<i>[Signature]</i>	04.04.26	0.230 WAS 0.238		

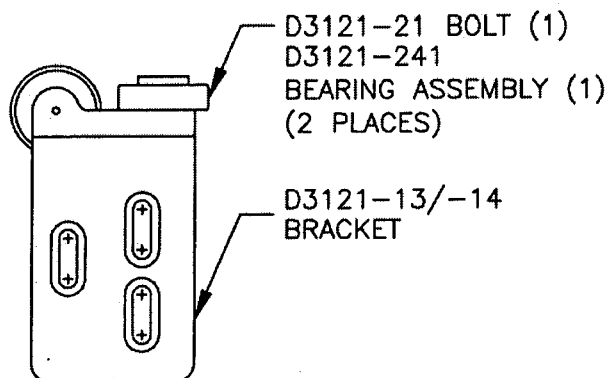
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04.03.01 *[Signature]*



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-11 BRACKET

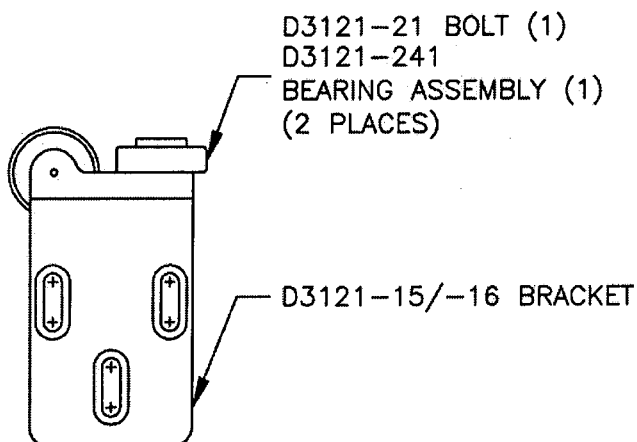
D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-13/-14
BRACKET

**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-15/-16 BRACKET

**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

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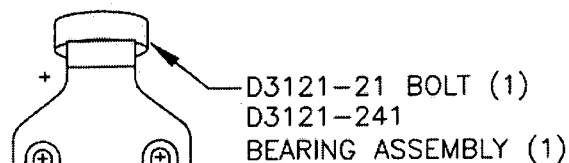
WORK ORDER
NO. *254413A*

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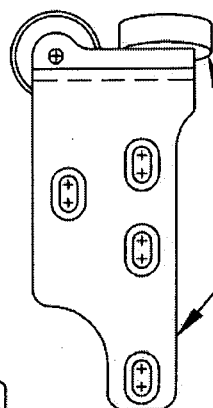


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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. C SHEET 2 OF 10
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:2



D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

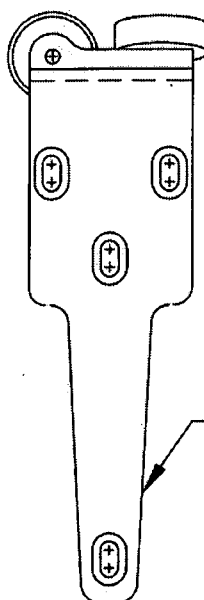
D3121-111 BRACKET



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-113/-114 BRACKET

D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-115/-116
BRACKET

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RETURN TO
D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)
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WORK ORDER
NO. 25441A

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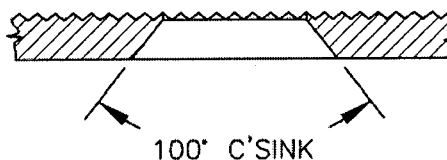
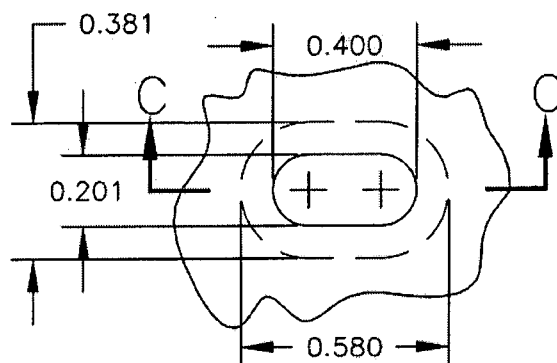
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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

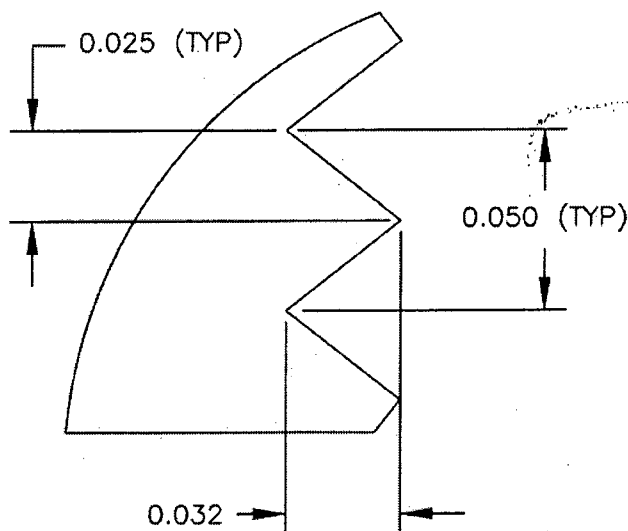
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04.03.01 #

DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



SECTION
C-C

DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20



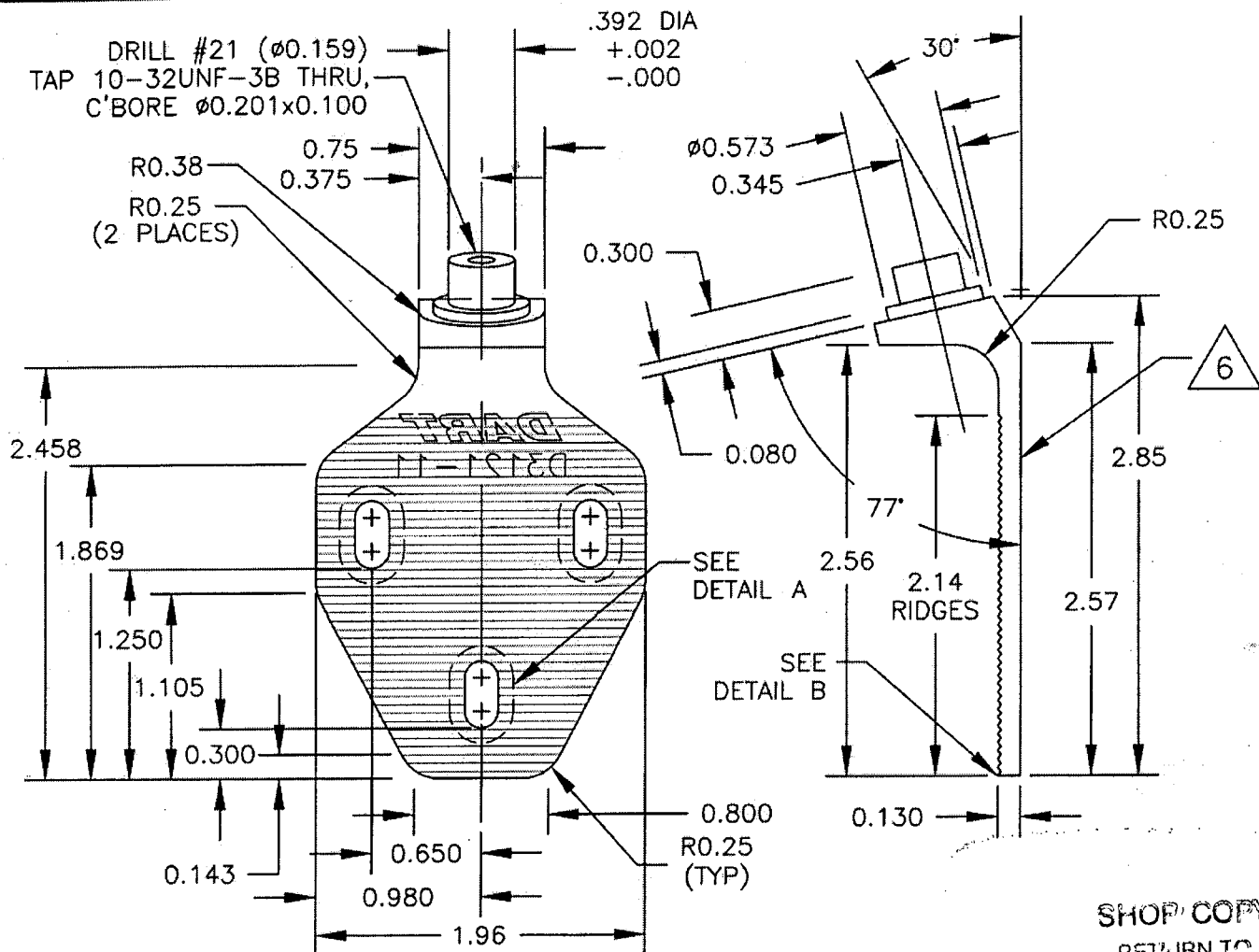
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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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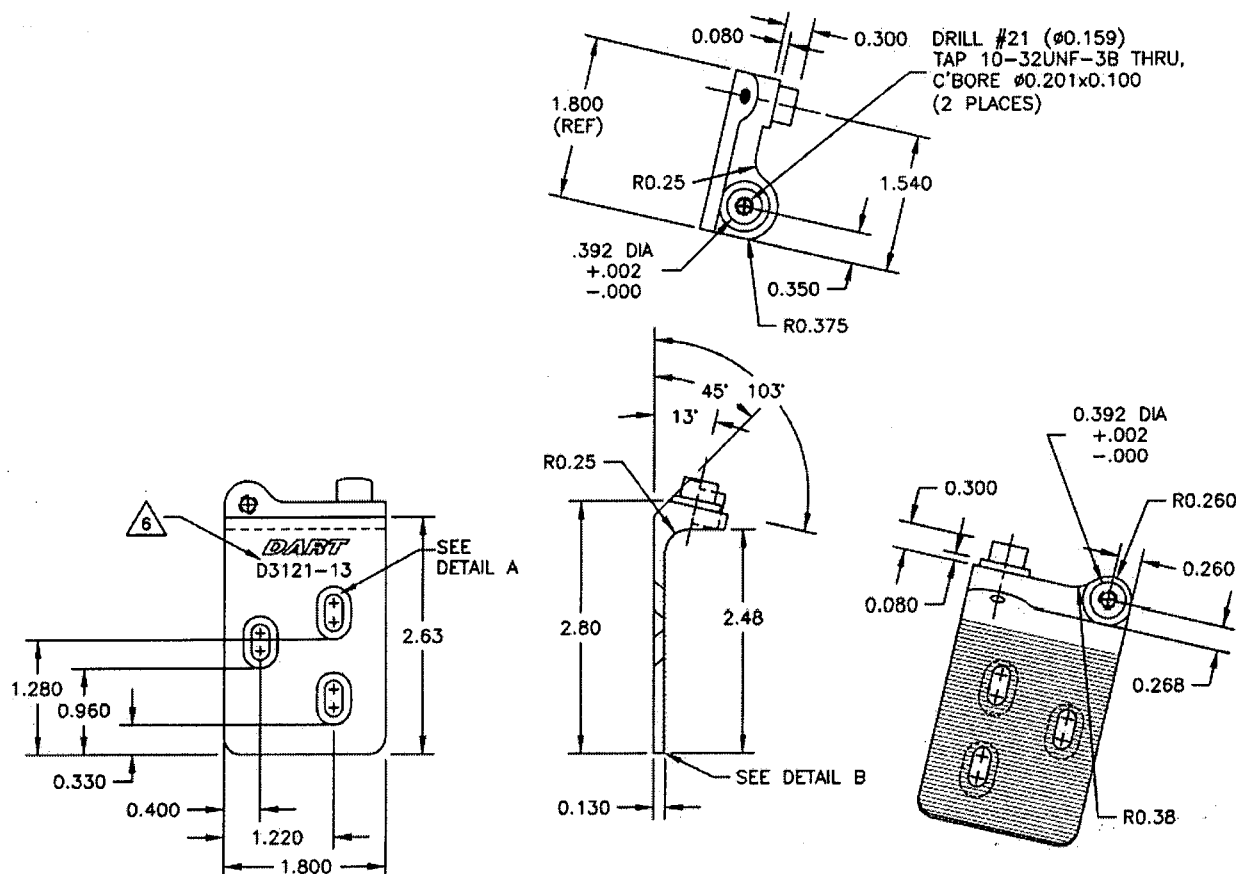
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-13 BRACKET (SHOWN)
D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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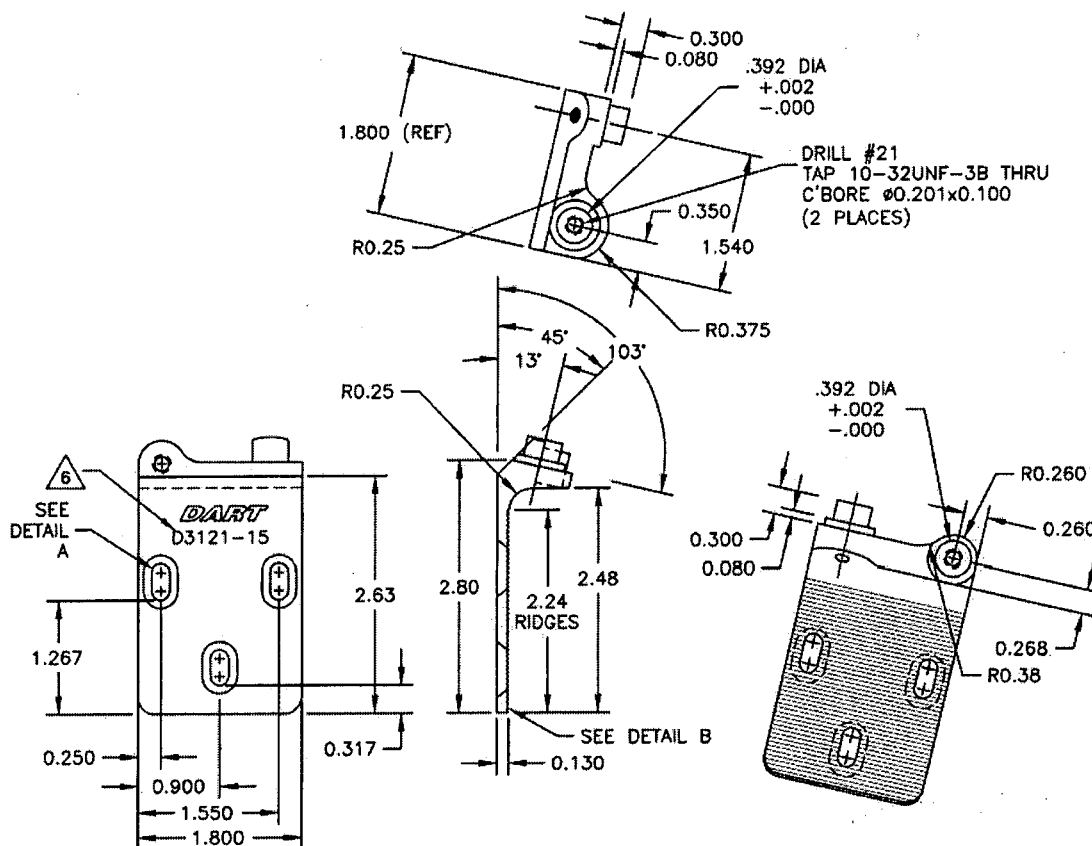
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-15 BRACKET (SHOWN)
D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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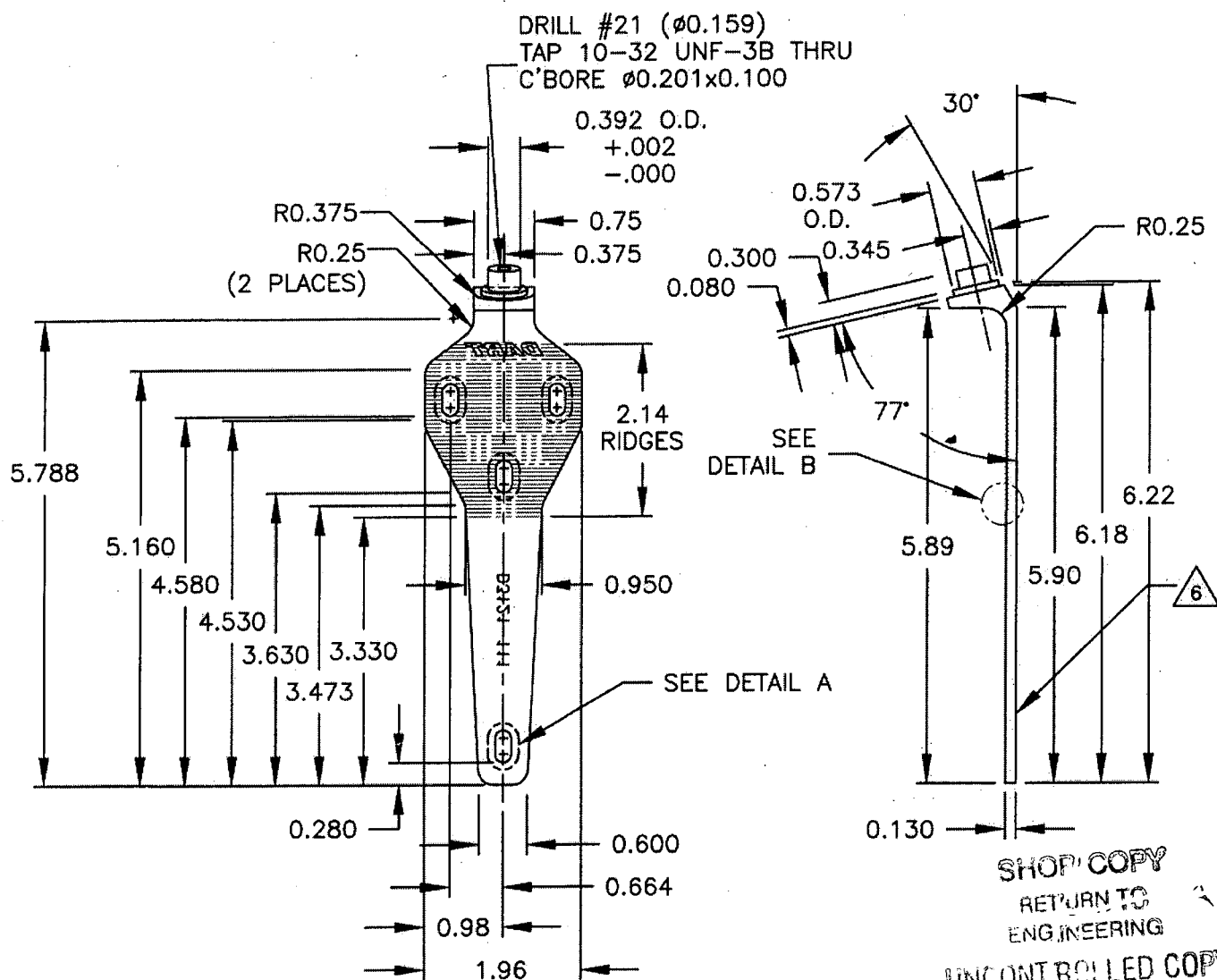
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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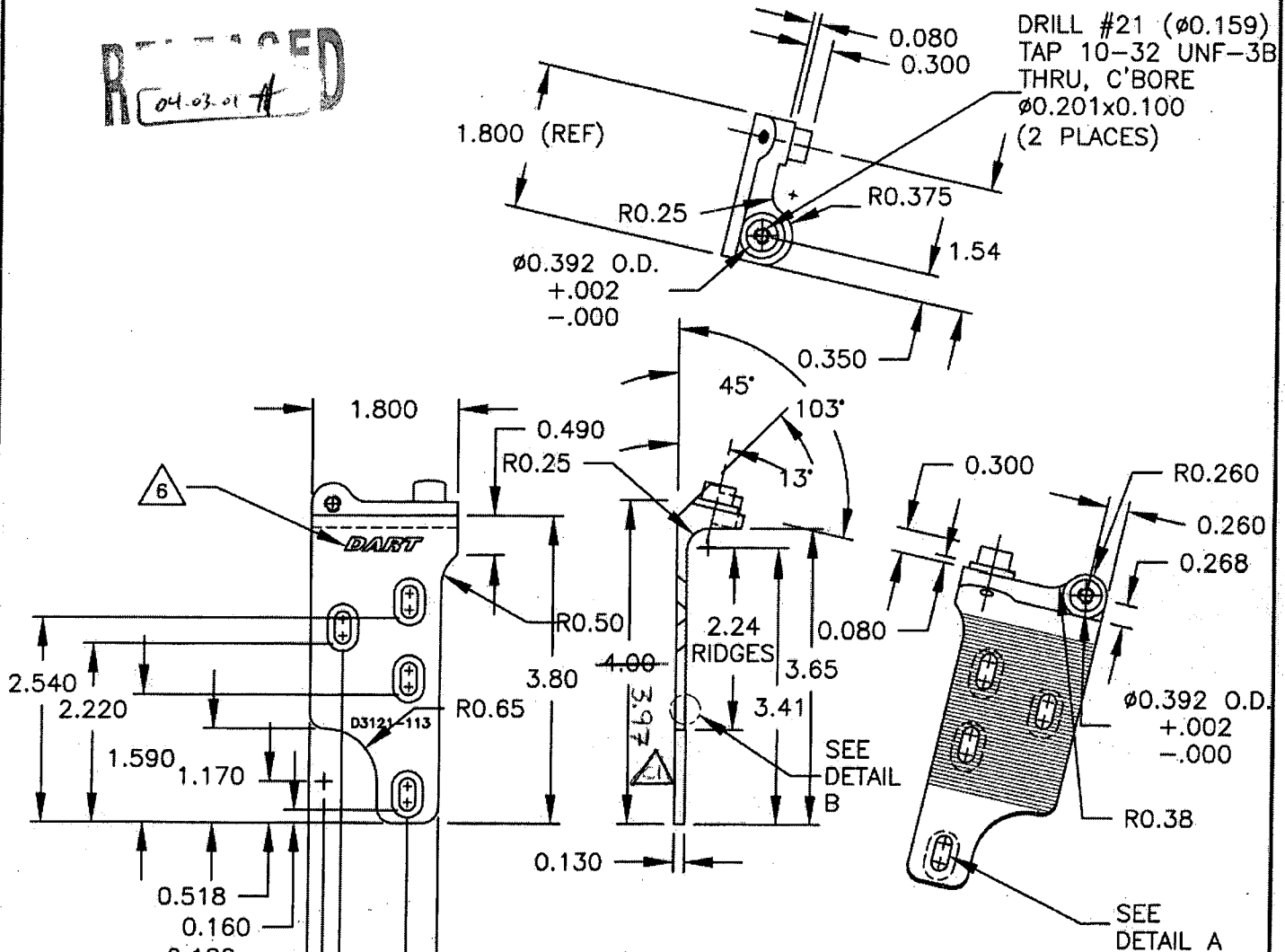
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DART

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3121	REV. C SHEET 8 OF 10
DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2

RECEIVED
04.03.01 *[Signature]***D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

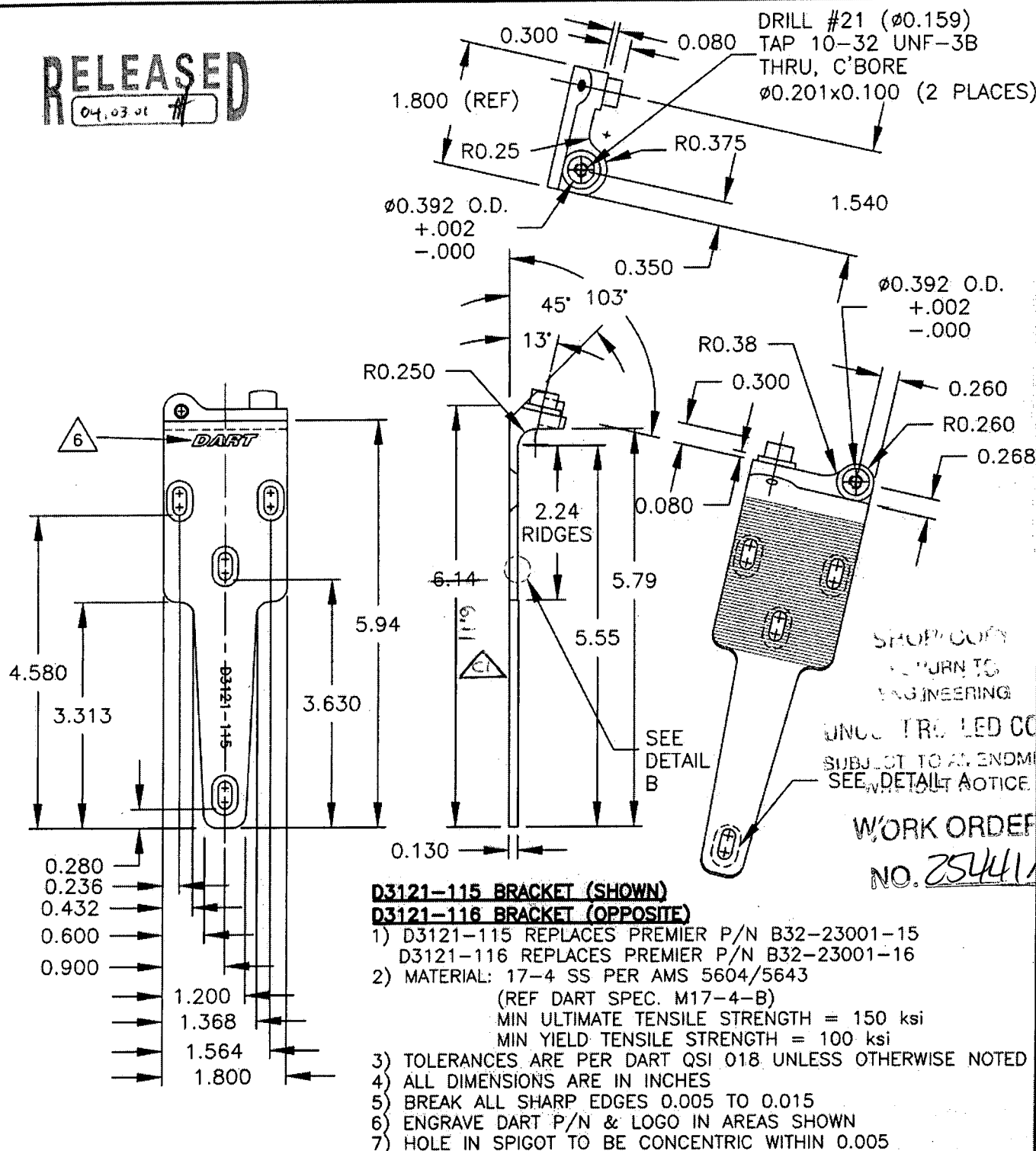
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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. C SHEET 9 OF 10
DATE 04.02.18	TITLE BRACKET ASSEMBLY	SCALE 1:2	

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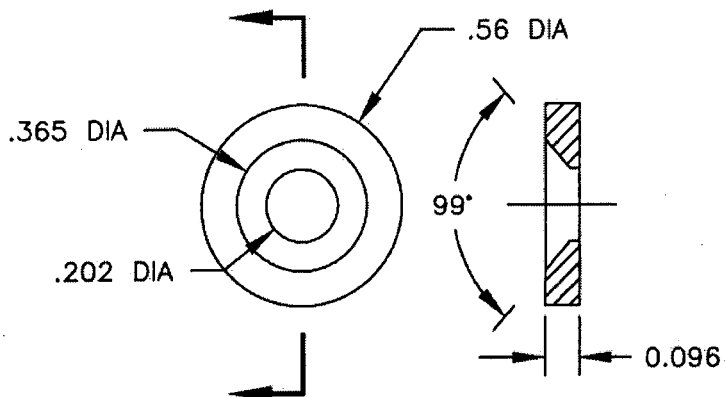


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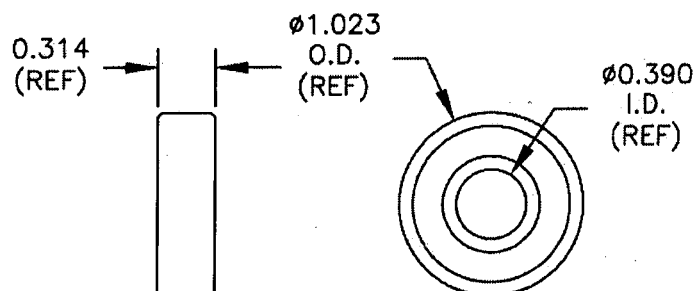
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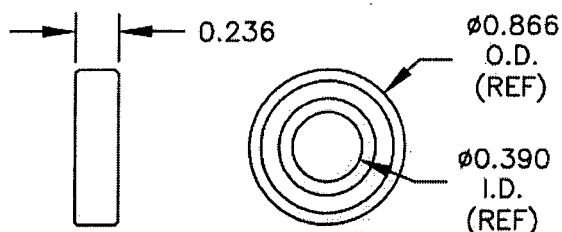
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CHECKED	APPROVED	DRAWING NO. D3121	REV. C SHEET 10 OF 10
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:1

**D3121-17 WASHER (SCALE 2:1)**

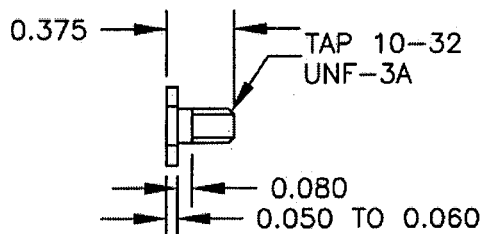
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

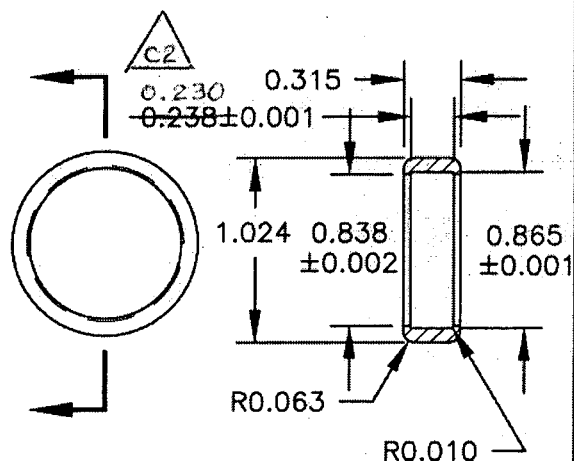
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

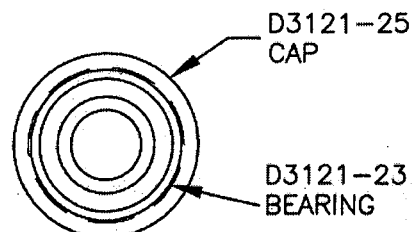
- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, #1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

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DART AEROSPACE LTD		Work Order: 25441A
Description: B24-1KET Assembly		Part Number: D321-11
Inspection Dwg: D321-11 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.032	± 0.010	0.031	✓		Depth gauge	
0.75	± 0.030	0.748	✓			
$\phi 0.201 \times 0.100$		0.201 x 0.103	✓			
0.392	± 0.002 -0.000	0.392	✓			Must fit bearing
2.14	± 0.030	2.123	✓			
0.950	± 0.010	0.948	✓			
1.96	± 0.030	1.959	✓			
0.280	± 0.010	0.279	✓			
3.330	± 0.00	3.329	✓			
3.630	± 0.00	3.630	✓			
4.880	± 0.010					
0.080	± 0.010	0.083	✓			
0.300	± 0.010	0.299	✓			
$\phi 0.573$	± 0.00	0.569	✓			
2.025	± 0.030	0.25	✓			
2.0375	± 0.030	0.375	✓			
6.18	± 0.030	6.191	✓			
5.90	± 0.030	5.915	✓			
0.130	± 0.010	0.123	✓			
5.89	± 0.030	5.901	✓			
0.381	± 0.010	0.382	✓			
0.201	± 0.010	0.198	✓			
0.580	± 0.010	0.580	✓			
0.400	± 0.010	0.398	✓			

Measured by: Ep	Audited by: TL	Prototype Approval:
Date: 06/01/22	Date: 06.01.22	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	